



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

a luxurious apartment, hung with gorgeous draperies and ornamented with costly faience and bric-à-brac. Some misunderstanding has led to war, and a terrific combat is raging, to the destruction of the many rare and beautiful objects around. The floor is strewn with the wreck, and a cat sneaks away under cover of a curtain.

A. J. H. WAY.

FLOWER PAINTING IN WATER COLORS.

I.—COLORS AND COMBINATIONS.

WATER colors can be bought in tubes, like oil colors, in whole cakes or half cakes, in pans or in half pans. These last are called moist colors, and only require a wet brush to rub off easily. The hard cakes must be ground upon a plate or palette. The price of cakes, pans and tubes is about the same. For the common colors, whole cakes, pans and tubes, the price is 25 cents; half size, 13 cents. The pans and cakes are of English manufacture, the tubes of French and German. If your colors are moist, which are decidedly to be recommended, take off the tinfoil and the layer of paper from the pan, and write the name on the bottom in ink, lest you forget it before you become familiar with the color.

The principal colors for flower painting are:

| | |
|------------------|---------------|
| Gamboge, | Rose Madder, |
| Yellow Ochre, | Carmine, |
| Indian Yellow, | Crimson Lake, |
| Burnt Sienna, | New Blue, |
| Vandyck Brown, | Antwerp Blue, |
| White (in tube), | Black, |
| Vermilion, | Light Red. |

These fourteen colors, when combined, give very good effects. All except four cost 25 cents a large cake, or pan or tube. Pink Madder costs 75 cents a cake; Carmine, 75 cents; Crimson Lake, 45 cents; Indian Yellow, 50 cents. There are others that would do even the beginner good service. There are greens already made, and purples. Hooker's Green, No. 1, is especially good, and costs 25 cents.

Here is another list which can be added to the first, but is not intended to supersede it. All the colors are valuable, and greater breadth can be reached with them:

| | |
|--------------|------------------------|
| Blue Black, | Cadmium, |
| Aureolin, | Lemon Yellow, |
| Raw Umber, | Raw Sienna, |
| Burnt Umber, | Hooker's Green, No. 1, |
| Brown Pink, | Mauve, |
| Terre Verte, | Brown Madder, |
| Sap Green, | Cobalt. |

If Rose Madder is too expensive, use a thin wash of Crimson Lake.

New Blue or Cobalt combined with Rose Madder or Crimson Lake makes a delicate Lilac. Mauve in thin washes gives a Lilac also, but it is generally too blue, and requires pink with it. Mauve with Carmine or Crimson Lake or Brown Madder gives a Royal Purple. But Mauve must be carefully handled. It is an aniline color, and no amount of washing will erase it from the paper; therefore, use it thinly. [It being fugitive, we should say, do not use it at all.—ED. A. A.]

Carmine and Vandyck Brown give a rich dark red for shading red flowers. The effect is the same as Brown Madder.

Antwerp Blue, New Blue, and Cobalt mixed with Gamboge, Indian Yellow, Yellow Ochre, Burnt Sienna, Vandyck Brown, Aureolin, Raw Umber, Brown Pink, Raw Sienna, and Lemon Yellow make all shades of green for foliage in landscapes or leaves for flowers. Hooker's Green, No. 1, combined with all the light yellows is useful for delicate greens.

Burnt Sienna is a warm red brown, good for shading yellows. Combined with Blue, makes Gray.

Vermilion is a bright Scarlet. Mixed with Carmine, makes a deeper and more brilliant Red.

Light Red shaded with Vandyck Brown, for bricks and tiles. This color is invaluable for grays in foliage, as well as flowers.

Gamboge is a delicate greenish yellow. Combines with Blues, or Browns, or Reds.

Yellow Ochre is a dull yellow, especially good for grays, or for greens in foregrounds.

Indian Yellow is a brilliant color. Combines with Blues for Greens; lights up Browns and Reds.

Lemon Yellow is a pale yellow for delicate flowers, and with Black shades them.

Raw Sienna is much like Indian Yellow, though not so bright. Combines in the same way.

Vandyck Brown is a rich warm brown. With Antwerp Blue makes a deep green.

Aureolin is a brilliant yellow of greenish tone.

Terre Verte is a gray green, especially valuable for distances, or the under sides of leaves.

Sap Green is a warm, rich color.

Brown Pink is a transparent bright greenish yellow, excellent for washing over Greens that are too blue; by the addition of Burnt Sienna, Gamboge or Crimson Lake gives good foreground foliage.

Burnt Umber and Raw Umber are good in foliage and in Grays.

Cadmium is a brilliant orange; with Vermilion makes Orange Red. When added to your list of colors, you will wonder you have been without it. It is not mentioned in the first list because it is expensive, and nearly the same effect can be gained with Vermilion and Gamboge, or Indian Yellow.

A good Olive Green can be made with Antwerp Blue, Gamboge, and Vermilion; and Olive Brown with Gamboge and Vandyck Brown.

There are several colors which, combined, make grays for backgrounds; for instance:

Brown Madder, New Blue, and any of the Yellows; Burnt Sienna and Antwerp Blue, Yellow Ochre, Light Red, and New Blue; Vandyck Brown and New Blue, Light Red, New Blue, and Gamboge; Yellow Ochre, Rose Madder, and Cobalt; Brown Madder and Cobalt. These combinations are not, however, delicate enough for shading flowers. Yellow flowers, if very light colored, can be shaded with Lemon Yellow and Black. If dark yellow, with Vermilion, Gamboge, Indian Yellow, Light Red, and Raw Sienna.

Grays for pink flowers can be made of Rose Madder and Black or Crimson Lake and Black, or Rose Madder and Emerald Green. (Emerald Green has not before been mentioned. It is not a necessary color, though much used by the French artists, especially in decorative work.)

Blue flowers can be shaded with any other blue than the lightest tint on the flowers, a little Rose Madder and Black added.

Lilac or Purple flowers, shaded with self-color Mauve, Crimson Lake, Carmine, New Blue and Black added.

A very delicate gray can be made with Yellow Ochre, Light Red, and New Blue; or with Aureolin, Cobalt, and Rose Madder. Either of these are excellent for white flowers. Allow the yellows to predominate in the shading of white flowers. The tendency is to make them too cold.

II.—PREPARATION FOR WORK.

If the sheet paper is used and you have drawing tacks, fasten it at the four corners to the drawing-board, after cutting to the size desired. If you have no tacks, use common small tacks, or the paper can be gummed at the extreme edge to the board. In this case, cut the paper one inch larger all round than the drawing to be made. Gum the extreme edge only. Wet the whole surface of the paper with a clean rag after it is gummed to the board. Wait until it is dry, and it will be perfectly smooth. If it is smooth without the water, there is no need of applying it. If you use a sketching-block, hold it in position on your knee if large enough, leaning against the table at one end; if not, fasten on your drawing-board.

Be seated so that the light will fall over your left shoulder, from one window only. If there are other windows in the room, darken them. If you can close the lower part and receive the light from the upper panes, your shadows will be clearer and deeper.

Place two bowls of clean water at your right hand, your colors, sponge, blotting-paper, and piece of moist bread also; your brushes and a fine pointed pencil within reach.

A china plate makes a very good palette. If the color is hard, wet the end, and rub off the color on the palette. Put as many colors on the palette as you expect to use. A little will answer of some kinds, but more of those that are used the most. If the colors are moist, in pans, a wet brush will remove as much as you require. The object in putting a portion of color on the palette is, that by doing so you can vary the tint as often as you choose. This is especially valuable to beginners, who by adopting this plan will soon know the various shades of color produced by combinations. It will only be by practice and careful observation that you will notice the beauties of light and shade. But you will be surprised to find how rapidly your eye will become

educated to detect even the delicate shades upon a white flower.

The simplest thing you can paint is a single flower. Having placed one in as natural a position as possible, draw the outline with care. Indicate the various folds with light lines, but do not shade them with the pencil. The ability to do this will come much sooner with practice than most persons suppose. The most accurate imitation in drawing, as well as color, is the first thing to be gained. "We must be able to put everything we see in nature into a picture before we venture to leave anything out," one writer says. It is best in coloring from nature never to draw more than can be finished at one sitting; because flowers, even in water, fade very soon. When gathering wild flowers to paint, carry with you to the fields a small bottle filled with water, and place the flowers in it immediately. This is the best way to preserve flowers at all times, if you intend to copy them. The heat of the hand is sure to wilt them; while the neck of the bottle clasps, it does not crowd them. The narrow-mouthed vial is also excellent to hold the flower to be painted. Having learned how to paint one flower or leaf, you can add a second or third, still in the vial, for you will thus get a freer, more natural bouquet.

III.—METHODS OF WORK.

There are two methods of using water colors—the English and the French. The first is that more used in this country, and better adapted to amateurs, especially those who are beginning to study flowers.

Having drawn the outline of the flower to be painted, select from your palette the lightest tint of color to be used. Wet the brush slightly and take enough paint upon it to spread over the whole flower, beginning at the upper left-hand corner, moving the brush toward the centre. Do not in any case turn your paper to accommodate your stroke—rather move your hand to accomplish this. Beginners generally use all the color in the brush at one stroke. In so doing, by taking a fresh brushful a decided line of a darker tint is left on the drawing. Nothing can change this if allowed to dry. Should this mistake be made while the drawing is wet, fill the brush with water enough to flow over the whole surface, and the paint already on the paper will flow evenly over the part. Fresh color must be taken frequently, so that no difference in the first tint is perceived. When this first wash is dry it can receive any number of tints desired.

Shadows seem to be so blended with the color of the flower as to be insensibly lost. To produce this effect, after shading, while still wet, wash the whole flower, shadow and all, with a very little of the clean water.

The darkest shadows can then be worked up when the painting is perfectly dry. After it has dried over night you will be surprised to find your painting look faded. It, however, only requires the shadows strengthened or deepened. Remember, *you cannot make a darker tint lighter* except by the addition of white, and then it will have lost its beauty. As soon as you put white with any color, you destroy the transparency which is the chief charm in water-color painting. On tinted paper the addition of white with all the colors used is absolutely necessary to cover the color of the paper. But we are talking now of white paper.

Do not allow the paints to run together on the plate. The delicate tints of flowers can be ruined by a little of any other color. In mixing two or three colors, take a fresh place on the palette or another plate for the purpose.

In painting white flowers, wash in the shadows, leaving the paper for the high lights, or lightest parts.

Let the strokes of your brush in a flower be toward its centre; in a leaf follow the veining from the centre of the leaf toward the sides; but never make a decided, regular veining, or you will have a good copy of a poor chromo card. Do not make a decided stroke to represent the veins; rather produce this by the shading. In very marked leaves, let the first tint be the vein in the centre, and shade from it. *But if you are far enough from your copy, you will not see many veins.* Half close your eyes, notice the shading in your leaf, and try to copy it exactly. Leaves are more difficult than flowers, and require careful study.

When your painting is nearly finished, rise, and making a funnel with both hands, look through with one or both eyes. In this way you shut out other objects in the room, and you will find that you will be able to judge of the colors of your flowers much better.



STUDY OF CHINA ASTERS. BY VICTOR DANGON.

(FOR DIRECTIONS FOR TREATMENT, SEE PAGE 23.)

Should you wish to make a background behind your flower, select some color that will harmonize with it. Perhaps you have been able to place behind your flowers some plain-colored textile material, whose general tone harmonizes and brings out in stronger relief the tints you are copying. If you could always do this, your drawing, especially if you make a background, would be more successful. But oftener one has no textile or paper, or, in fact, anything that will make an appropriate background, and then you must rely upon your own judgment and taste—that is, if you want a background.

In the beginning it is not advisable to attempt a background; but when you have become familiar with handling the colors, try it by all means. Proceed in the following way:

Having selected the desired tone and placed a large enough amount of color on the palette, take the largest brush you have—a flat tin-mounted one of camel's-hair will do—with plenty of water and a good deal of color. Begin at the upper left-hand corner. Let the strokes be sideways, not up and down, as if you were painting a wall. Avoid touching the same spot twice. Draw the color very nearly to the flowers and leaves all round. Use enough color to make the tone deeper at the lower part of the paper under the flowers, more particularly on the right side. When the paper is all covered, take a small dry brush and blend the background color carefully with the color of the flower. As the paper will be still moist, this will not be difficult. But a successful background is a very difficult thing to make, and requires patience and perseverance. It is best to attempt this again and again, without the flower study on the paper. The secret of success lies in putting the right color and the right quantity on the first time, and then not disturbing it.

This manner of making a background leads me to speak of the French method of water-color drawing, which is very similar.

Just here let me say, in drawing the outline of the flowers you are to paint, in all cases exaggerate their size. Most persons do this without effort—that is to say, it is perfectly natural for them to do so. A good way to educate the eye to judge of size accurately is to take a pair of compasses, measure each petal, each stamen, each leaf, and dot the paper to correspond with these sizes in the proper places. Practice will soon enable one to do this without the compasses.

In adopting the French method, the paper is an important feature to be considered. Only the heavier kinds of Whatman's paper can be used with satisfaction—those retailing for 90 cents and \$1.25 a sheet. The coarse 40 cents variety is good, but if used must be pasted to a thick pasteboard.

After drawing lightly the exaggerated outline, as before described, the paper being securely fastened to the drawing-board, the whole surface of the paper, drawing and all, is wetter with clean water by the brush or sponge. Wait for this to nearly dry. Having decided upon the tint of the background, take the largest brush you have, load it with water and with color, beginning in the upper left-hand corner, and pass over the paper in a slanting direction with few strokes until you meet the edges of the drawing. Wash the brush quickly, and if there is so much water and color close to the drawing as to endanger it, take it up with a corner of the blotting-paper. Then at once take the color of the shadows of the flower on the brush and wash in the prominent shadows, leaving the high lights or lightest parts of the flower. Blend the tint on the edge of the flower, with the background, with a dry brush. Pass rapidly from flower to flower, from leaf to leaf, carrying on the background also on the sides of the study, until reaching the bottom of the paper. The highest lights, if in color, are put on last, and the painting is complete.

By this method the true colors for lights and shadows are put upon the paper in the first painting. Edges of flowers or leaves left in places of the white paper give force and crispness to the whole. The paper should be wet during the whole process, the background not being allowed to dry on either side. The painting when dry should be so deep in tone as to require but little if any strengthening. It will be seen that by this method, rapidity of work, clearness of perception, and thorough knowledge of colors and their combinations are absolutely essential to success. All truly good work looks simple, and it is eminently a proof of the beauty and popularity of this method that it looks as if any one could do it.

L. STEELE KELLOGG.

Amateur Photography.

CONDUCTED BY GEORGE G. ROCKWOOD.

DR. PIFFARD'S FLASH LIGHT.

THE invention, or the discovery, of Dr. H. G. Piffard's flash light, by which instantaneous pictures can be made at night, is one of the most interesting devices of latter-day photography. The doctor for some years has been interested in microscopy and photography, using both in the illustration of his professional work. The inconvenience of securing the services of professional photographers, and of the removal of his patients to public establishments, led him to operate for himself, and by and by to become expert in the use of the camera. The proper lighting of subjects in an ordinary dwelling or office was not always the most desirable; so for a long time he has been experimenting to produce an artificial light that would answer his purposes, and he has at last produced a very simple combination, which not only accomplishes all he could desire, but opens up possibilities to the professional and amateur photographer that may well be termed marvellous.

One evening recently Dr. Piffard visited my place, and supplied the illumination by which I made excellent negatives in about a quarter of a second each. Adults and children, laughing and talking, were photographed with absolute accuracy. A screen was interposed between the sitter and the source of light, thus softening and adding artistically to the effect. The light is so adaptable that a negative of a little laughing child was made at nine o'clock, and in less than a quarter of an hour a life-size enlargement was completed from the same negative. The results are obtained from a compound rather than an apparatus. The material for all the experiments of the evening were furnished from an ordinary envelope which Dr. Piffard brought in his pocket. As I have already said, the possibilities of the invention are wonderful. The compound can be loaded into a pistol, and while it is discharging, a picture can be made by its flash. This has absolutely been done. I have already devised a "pistolograph," which when pointed at an object can expose a sensitive plate and furnish its own light by one movement of a trigger. The darkest night or gloomiest cave will be no obstacle to the finding and photographing on the spot of criminals and suspected persons.

Dr. Piffard explained and demonstrated his method before the Society of Amateur Photographers at their last meeting. The knowledge of the possibility of such photographs is not new; as during the past summer Vogel and Gaedicke have made them abroad, but by means that are not altogether safe, as the chemicals employed are liable to explode unexpectedly. Dr. Piffard has simplified the proceeding, and makes use of means that are not only safe, but can be readily obtained.

He prepares upon any metal dish or incombustible surface a small pad of gun-cotton (pyroxyline) covering, say, four square inches and weighing perhaps five or six grains. Upon it is sprinkled from ten to fifteen grains of magnesium powder; this, when ignited by a match or electricity, will give a flash of light strong enough to make a good instantaneous photograph within ten or fifteen feet of the source of light.

BLEACHED PRINTS FOR "PROCESS" ENGRAVING.—Doubtless many draughtsmen who read *The Art Amateur* are in the habit of using the untinted silver print as the basis of their drawing for reproduction by one or the other of the various mechanical photographic processes. As they are aware, these prints require good daylight for printing, and are not available by any of the processes of artificial light, and therefore any method of making prints for this process by such light is very desirable. Several persons have been experimenting with the bromide paper with this end in view, and Messrs. Roberts & Fellows, of Philadelphia, I understand, have succeeded in making bleach prints on bromide paper clean and bright, and all that could be desired for the photo-engraving process. As I understand their method, they do not use chloride of mercury, which is ordinarily employed for bleaching the plain paper, but substitute a solution of cyanide of potassium, adding a few grains of dry iodine. These two agents seem to possess a wonderful affinity for each other, and the iodine is readily taken up. The solution is made quite weak, and is flowed over the bromide paper which has been drawn upon with water-proof ink. Immediately the photograph begins to disappear, and soon we see the pen drawing standing out beautifully against a perfectly white background. Of course the thinnest of the bromide paper should be used for this purpose.

THE NEW DEVELOPER.—Hydrochinon, a developer long in

use in England, especially among amateurs, has been adopted by many photographers in the United States. It has the merits of stability and uniformity in its results. Some of our most distinguished amateurs of this city, including Mr. Roosevelt, Mr. Newton, and Dr. Piffard, have given it a thorough trial, and are much pleased with it. It is slower in its action than pyro, is free from fog tendencies, and enables one to carry the development to almost any degree. The solution keeps clear, and can be used repeatedly. It is possible to develop fifty plates with one given quantity, perhaps three of the same amount of pyro. It is much more expensive than pyro, but one being able to use it so long, it is about as cheap in the end. Those who have tried it for lantern slides speak of it with enthusiasm. Dr. Piffard gives the following formula as the most trustworthy:

No. 1.

Hydrochinon.....15 grains.

Water.....1 ounce.

No. 2.

Carbonate of Soda (Crystals) C. P.....30 grains.

Water.....1 ounce.

For developing a normally exposed plate, equal parts of the above are advised. Over-exposure is remedied by less of No. 2. For lantern slides, both No. 1 and No. 2 are diluted until the right strength of the image is obtained.

A NEW "FINDER."—The old saying that "necessity is the mother of invention" was illustrated during my last voyage from Europe. Being without a "finder" to my detective camera, it occurred to me, while talking to a near-sighted friend, to hold one of the lenses of his spectacles up to a view. I found the picture very complete upon the surface of the "minus" glass which he wore. Upon reaching New York I had one put into a small steel frame and screwed upon the top of my camera. I found that there was reproduced upon this little concave surface the picture which I sought to secure upon my sensitized plate, and at a cost of a few cents I had secured a most perfect "finder." I then had it hinged so as to fold down out of the way when not in use. As I announced at the recent meeting of the Society of Amateur Photographers, any one is at liberty to use this contrivance.

AN EAR SUBORDINATOR.—It has often been a serious problem with me how to diminish the undue prominence of large ears in ordinary portraiture, which often interferes seriously with securing the most desirable view of the face. I have contrived what may be called an "ear subordinator." It is a little appliance in the form of a clasp, which is attached to the edge of the ear, passes round behind the head, and holds the unruly member in a subordinate position. This may appear a bit of practical humor; it is really an important adjunct to successful portraiture in these days of abnormal aural development.

PHOTOGRAPHING BY TELESCOPE.—An interesting experiment was recently tried by a Swiss photographer who made pictures of very distant objects with the aid of a telescope, whereby he obtained an image fifty diameters larger than could be secured by an ordinary photographer's lens. The experiment was so practical that I mistrust it was suggested by a new photographic lens I saw in London, by which approximate results were obtained. It has long been known that single combinations give more brilliant results than the double lens, and it only needed a skilled optician like Mr. Dallmeyer to make a single combination which would prove a practical success. I saw in his place the model of a rapid landscape lens which had been tried at twenty minutes past five in the afternoon, and gave an instantaneous view of a street in St. Petersburg, equal to anything that I have ever seen taken at mid-day with the usual combination. It gives a large and most pronounced image of distant objects. Instances could be multiplied in which such a lens would be of great value, such as distant mountain views, groups of cattle in the distance, and in many cases where interesting objects are so far away that, photographed with the ordinary view lenses, they appear dwarfed and insignificant. This new invention gives a telescopic effect. The lenses are probably not yet in the market, but when they are made—and Mr. Dallmeyer said that he was giving his earnest attention to them—they will be of great value. They are a single combination, being composed of three cemented lenses; they produce no appreciable distortion, work quickly, and afford the most brilliant effects.

AMATEUR PHOTOGRAPHIC SOCIETY NOTES.—At the last meeting of the Society of Amateur Photographers of New York, notice was given that the last Wednesday in each month will be exclusively devoted to the exhibition of lantern slides, the Saturday evening preceding such exhibition to be given to testing slides produced by members or others. An interesting feature is the proposed interchange of slides for monthly exhibitions among the several societies of Baltimore, Boston, Chicago, Cincinnati, New York, Philadelphia, Pittsburg, and St. Louis, each organization lending to another a set of one hundred slides, the work of its members. The slides are to be sent from one society to the other, until all have been exhibited.—Among the distinguished gentlemen who have joined the New York Society are Dr. E. P. Fowler, Dr. D. H. Good-Willie, Dr. E. F. Brush, and the Hon. J. B. Thatcher.—Members using the new developer, hydrochinon, say it is not necessary to rock the plate, as is usually done with pyro; so a number of plates can be put into a dish and left for development while other matters are being attended to.—Mr. Bell-Smith, of the Eastman Dry Plate Co., gave an interesting demonstration of the American films, and produced the conviction that the days of carrying glass are numbered, and that the amateur will start upon a tour carrying ounces instead of pounds. (I found Nadar, of Paris, successfully and almost exclusively using the film negatives for out-door work.—G. G. R.)—Mr. Beach showed a new instantaneous and time shutter, which is so extremely thin (less than one sixteenth of an inch) that it can be easily introduced in the place of the ordinary diaphragm of a view lens. It is simple and practical, and likely to be popular.